Curriculum Vitae
Tomer Volansky

Office address:

School of Physics and Astronomy
Tel-Aviv Univeristy, Ramat Aviv, Israel
Kaplun Building, room 413
Phone: (972) 3-640-7026
Fax: (972) 3-640-9306
E-mail: tomerv@post.tau.ac.il

Home address:

9 Hermon St.
Nirit, 44805, Israel
Phones:
(972) 3-604-4992 (home)
(972) 54-720-4447 (cell)

Education

2000	**B.Sc.** Physics and Mathematics, The Hebrew University of Jerusalem. Magna cum laude ("Amirim" program for excellence).
2003	**M.Sc.** Physics department, Weizmann Institute of Science, Israel. Thesis: *Topics in Particle Cosmology* Thesis advisors: Prof. Micha Berkooz and Prof. Yossi Nir
2007	**Ph.D.** Physics department, Weizmann Institute of Science, Israel. Thesis: *From Particle Cosmology to String Theory* Thesis advisors: Prof. Micha Berkooz and Prof. Yossi Nir

Academic Positions

2007-2010	**Member (Postdoctoral Fellow)** Institute for Advanced Study, Princeton, NJ.
2010-2011	**Postdoctoral Scholar** Berkeley Center for Theoretical Physics, UC Berkeley, CA.
2011-2014	**Senior Lecturer** Tel-Aviv University, Israel.
2014-	**Associate Professor** Tel-Aviv University, Israel.

2011-2016	**Scientific Adviser** Weizmann Institute of Science, Israel.

Short Term Positions

2012-2015	**Short Term Associate** ATLAS experiment at the LHC, CERN.
2013-2014	**Short Term Associate** XENON100 collaboration.

Awards and Honors

1998	Dean's excellence prize, Hebrew University
2003	M.Sc. Prize of Excellency, Weizmann Institute of Science
2005-2007	The Clore Fellowship for outstanding Ph.D. students
2007-2008	The Rothschild Postdoctoral Fellowship
2008	Ph.D. Prize of Excellency, Weizmann Institute of Science
2011	Alon Fellowship for Young Researchers (awarded by the Council for higher education, MALAG)
2012	The Raymond and Beverly Sackler Young Faculty Chair
2013	The Krill Prize for Excellence in Scientific Research (awarded by the Wolf Foundation).
2014	Offered a 5 year staff position at CERN (declined)
2015	Israeli Physical Society (IPS) prize for outstanding young scientist.
2017	Elected member of the Israel Young Academy of Sciences and Humanities.

Institutional Responsibilities

2011-2012	**Organizer of the physics colloquium**
2011-	**Organizer of the internal seminar**
2014-	**Co-Organizer of a joint particle physics seminar**, Tel-Aviv University, Weizmann Institute and Technion.

Organization of Scientific Meetings

2009	Workshop, *"Current Trends in Dark Matter"*, IAS, Princeton, USA.
2010	Workshop, *"From Colliders to the Dark Sector: Understanding Dark Matter at Particle Colliders and Beyond"*, Aspen Center for Physics, Aspen, USA.

2014	Conference, *"Frontiers in Particle Physics: From Dark Matter to the LHC and Beyond"*, Aspen Center for Physics, Aspen, USA.
2014	Workshop, *"Exotics Physics Workshop"*, Eilot, Israel.
2014	Workshop, *"Naturalness 2014"*, Weizmann Institute, Israel.
2015	Workshop, *"Beyond WIMPs: From Theory to Detection"*, Kibutz HaGoshrim, Israel.
2015	Workshop, *"Lattice Gauge Theory Beyond the Standard Model"*, Tel-Aviv University, Israel.
2016	Workshop, *"62nd Meeting of the Israel Physical Society"*, Tel-Aviv University, Israel.
2017	Workshop, *"Mini-Workshop on Beyond the Standard Model"*, Neot Smadar, Israel.
2017	Workshop, *"Particle Physics in 2017: From the LHC to Dark Matter and Beyond"*, Aspen Center for Physics, Aspen, USA.
2017	Workshop, *"Beyond WIMPs: From Theory to Detection"*, Stony Brook University, USA.

Commissions of Trust

2007-	**Reviewer**, Journal of High Energy Physics (JHEP), Journal of Cosmology and Astroparticle Physics (JCAP), Physical Review D, Nuclear Physics B, Astroparticle Physics, Physics Letters B, Nature Physics, German-Israeli Foundation (GIF), VIDI Scheme, Israel Science Foundation (ISF).
2014-	**Review panel member**, Binational Science Foundation. PAZI foundation.

Grants

2011-2014	EU FP7 Career Integration Grants (CIG) grant No. 293557 "From Dark Matter to the Large Hadron Collider: A New Data-Driven Era" 100,000 EURO over four years. **Principal Investigator**.
2011-2014	Israel Science Foundation (ISF) grant No. 739/11 "Particle Physics in the New Data-Driven Era" 780,000 NIS over four years. **Principal Investigator**.

2011-2014	Binational Science Foundation (BSF) grant No. 2010221 "Physics beyond the Standard Model: Dark Matter and the LHC" $112,000 over four years. **Principal Investigator**. Grant shared equally with Yael Shadmi (Technion).
2013-2018	I-CORE Excellence Center "The Quantum Universe" $45M for five years. **Principal Investigator**. Grant shared with the whole center (17 members).
2015-2017	German-Israeli Foundation for Scientific Research and Development (GIF) grant No. I-1283-303.7/2014 "Frontiers in Dark Matter and Particle Physics Phenomenology: From Theory to Detection" 180,000 EURO for three years. **Principal Investigator**. Grant shared equally with Alejandro Ibarra (TUM, Munich).
2015-2018	PAZI Foundation "New Directions For Ultra-Low-Threshold Detectors: Towards Detection of Light Dark Matter Neutrinos and slow Neutrons" 1,520,000 NIS for four years. My share roughly: 400,000 NIS. **Principal Investigator**. Grant Shared with: Ranny Budnik (Weizmann), Ori Chechnovsky (TAU), Arik Kreisel (SNRC) and Avner Soffer (TAU).
2015-2020	ERC Consolidator "Going Beyond the WIMP: From Theory to Detection of Light Dark Matter" 1,820,000 EURO for five years. **Principal Investigator**.

Teaching Experience

2015-	Lecturer - *Particle Physics 2*, Tel-Aviv University, Israel.
2012-	Lecturer - *Particle Physics 1*, Tel-Aviv University, Israel.
2012-2016	Lecturer - *Advanced Electromagnetism*, Tel-Aviv University, Israel.
2011-2012	Lecturer - *Physics beyond the Standard Model*, Tel-Aviv University, Israel.
2002-2006	Teaching Assistant - *Field Theory and Advanced Quantum Mechanics*, Weizmann Institute of Science, Israel.

Students and Postdocs

2012-2015	**Amir Yaakobi, M.Sc.**, *Topics in Direct Detection of Dark Matter*
2015-	**Noam Levi, M.Sc.**
2015-	**Nadav Outmezguine, Ph.D.**
2014-	**Itay Bloch, Ph.D.** , *Axions and Dark Matter*
2012-2017	**Oren Slone, Ph.D.**, *Topics in Dark Matter Physics and Collider Phenomenology*
2011-2013	**Eric Kuflik, Postdoc**, (now in Cornell).
2014-2017	**Lorenzo Ubaldi, Postdoc**.
2014-2017	**Kohsaku Tobioka, Postdoc**.
2014-2017	**Walter Tangarife, Postdoc**.
2016-	**Diego Redigolo, Postdoc**.

Military Service

1993-1996	Intelligence force, technological research

Invited Talks

2002	Workshop on Time Variations in Alpha, Weizmann Institute, Israel.
2006	International School on LHC Physics, Weizmann & Technion Israel.
2008	"Physics of the Large Hadron Collider", KITP, Santa Barbara.
2009	"The Year of the Ox", Aspen Center for Physics.
2009	"SM-BSM physics at the LHC", CERN, Geneva.
2011	"Indirect and Direct Detection of Dark Matter", Aspen Center for Physics.
2012	"Implications of LHC results for TeV scale physics", Plenary Talk, CERN, Geneva.
2012	Rencontres de Moriond 2012, Plenary Talk, La Thuile, Italy.
2012	PLANCK 2012, Plenary Talk, Warsaw, Poland.
2012	52nd Cracow School of Theoretical Physics, Zakopane, Poland.
2012	"Lessons from the first phase of the LHC", DESY, Hamburg, Germany.
2012	"Understanding the TeV Scale Through LHC Data, Dark Matter, and Other Experiments", GGI, Florence, Italy.
2012	Johns Hopkins 36th Conference, Plenary Talk, Florence, Italy.
2013	SEARCH Workshop, Stony Brook, USA.
2013	"SUSY: Model building and Phenomenology", IPMU, Japan.
2014	"GGI Lectures on The Theory of Fundamental Interactions ", GGI, Italy.
2014	"Theory, Phenomenology and Experiments in Flavour Physics", Capri, Italy.

2014	New Physics Korea Institute (NPKI) workshop, Jeju, Korea.
2015	DARWIN workshop, Weizmann, Israel.
2015	"Off the Beaten Track", ICTP, Italy.
2015	"Anticipating Discoveries: LHC14 and Beyond", Max Planck Institute, Germany.
2015	"Symposium on High Energy Physics", Niels Bohr Institute, Copenhagen, Denmark.
2015	European Physics Society 2015 (EPS-HEP), Plenary review talk, Vienna, Austria.
2015	Lepton-Photon 2015, Plenary review talk, Ljubljana, Slovenia.
2015	"Prospects in Low Mass Dark Matter", Max Planck Institute, Germany.
2016	"Searching for Exotic Hidden Signature with ATLAS in LHC Run2", Cosenza, Italy.
2016	"The 3rd NPKI Workshop: The lesson from the first results of Run 2 of the LHC", Seoul, South Korea.
2016	"LHC-Ski", Obergurgl University, Austria.
2016	"Integration into Future Linear Collider Detectors", review talk, Tel-Aviv University, Israel.
2017	"Physics in LHC and the Early Universe", review talk, Tokyo, Japan.
2017	"ICTP-SAIFR South American Dark Matter Workshop", review talk, Sao Paulo, Brazil.

Seminars and Colloquia

2003	*The cosmological moduli problem*, Technion, Israel.
2003	*The cosmological moduli problem*, International School on Astroparticle and Neutrino Physics, Italy (Won first prize in students' talk competition).
2004	*Baryogenesis from the KM phase*, LBNL, Berkeley.
2005	*What can flavor physics tell us about Baryogenesis*, Weizmann Institute.
2006	*Extracting Flavor from Quiver Gauge Theories*, SUSY06, Irvine.
2006	*Neutrino Anarchy from Quiver Gauge Theories*, UC Irvine.
2006	*Neutrino Anarchy from Quiver Gauge Theories*, Caltech, California.
2006	*Neutrino Anarchy from Quiver Gauge Theories*, LBNL, Berkeley.
2006	*Neutrino Anarchy from Quiver Gauge Theories*, CERN, Geneva.
2007	*MFV@LHC: Constraining Flavor at the TEV Scale*, Cornell University.
2007	*MFV@LHC: Constraining Flavor at the TEV Scale*, Boston Univeristy.
2008	*Phases of MFV*, Johns Hopkins.
2008	*Towards a Complete Theory of Gauge Mediation*, Rutgers University.
2008	*Towards a Complete Theory of Gauge Mediation*, Neve Shalom, Israel.

2008 *Semi-direct Gauge Mediation*, IAS, Princeton.
2008 *Semi-direct Gauge Mediation*, Hebrew University.
2008 *Semi-direct Gauge Mediation*, Weizmann Institute.
2009 *Dark Matter Sees the Light*, Harvard, Boston.
2009 *Dark Matter Sees the Light*, University of Maryland.
2009 *Dark Matter Sees the Light*, NYU.
2009 *Dark Matter Sees the Light*, University of Pennsylvania.
2009 Colloquium, Tel-Aviv University.
2009 *Indirect Probes of the Hidden Sector*, IAS, Princeton.
2009 *Indirect Probes of the Hidden Sector*, LBNL, Berkeley.
2010 *Indirect Probes of the Hidden Sector*, Cornell University.
2010 *Hiding the Higgs in Lepton Jets*, University of Washington.
2010 *Hiding the Higgs in Lepton Jets*, SLAC.
2010 *Hiding the Higgs in Lepton Jets*, UC Irvine.
2010 *Hiding the Higgs in Lepton Jets*, LBNL, Berkeley.
2010 *Hiding the Higgs in Lepton Jets*, UC Davis.
2011 *Asymmetric Dark Matter from Leptogenesis*, Stony Brook.
2011 *New Avenues for Direct Detection of DM*, Neve Shalom, Israel.
2013 *Higgs Decaying to Lepton Jets*, University of Rome, Italy.
2013 *The LHC, Dark Matter and Beyond*, Colloquium, Bar-Ilan, Israel.
2014 *The Hunt for Dark Matter*, "The Quantum Universe" I-CORE Meeting, Technion, Israel.
2014 *The Hunt for Dark Matter*, Tel-Aviv, Israel.
2014 *Beyond WIMP: From Theory to Detection of Sub-GeV Dark Matter*, Colloquium, CERN.
2014 *The Hunt for Dark Matter*, IPS, Israel.
2015 *The LHC, Dark Matter and Beyond*, Colloquium, Technion, Israel.
2015 *From the Big Bang, through the Discovery of the Higgs Boson and to the Secrets of Dark Matter: On the Search for the Theory of Everything*, Public talk, Tel-Aviv, Israel.
2016 *The LHC, Dark Matter and Beyond*, Colloquium, Hebrew University, Israel.
2017 *The Hunt for Dark Matter*, Colloquium, Sao Paulo, Brazil.
2017 *Relaxed Inflation*, Brussels, Belgium.
2017 *New Avenues in the Search for Dark Matter*, Orsay, France.